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10/715,125

11/18/2003

Jun Kashimura

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GRIFFIN & SZIPL, PC
SUITE PH-1
2300 NINTH STREET, SOUTH
ARLINGTON, VA 22204

EXAMINER

NATHAN, SHYAM

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/715,125 | Applicant(s) KASHIMURA ET AL. | |
| | Examiner SHYAM NATHAN | Art Unit 4161 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) 19-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 01 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date | 6) <input type="checkbox"/> Other: ____. |

12052007,06272007,06272007,05072007,05072007,8162006,05102006,05102006,02032006,02032006,09162005,04092004.

DETAILED ACTION

Claims 1-18 are currently pending and are the subject of this Office Action, claims 22-28 have been withdrawn. This is the first Office Action on the merits of the claims.

Priority

The earliest effective U.S. filing date afforded the instant claimed invention has been determined to be November 18, 2002, the filing date of application JAP-2002-334023.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11, 13-17 are rejected under 35 U.S.C. 102(b) as being anticipatory by Mentink et al.(US patent No. 5,360,621;issued Nov.1,1994).

Instant claim 1 is drawn to a reducer of blood glucose level increase, comprising palitinose as an active ingredient, wherein said reducer is ingested by an individual, before or after or simultaneously with consuming carbohydrate having an alpha-1,6-glucosyl bond ratio of from 0% to less than 50% relative to the total bonds among constituent saccharides, said reducer reduces an increase in blood glucose level of the individual caused by consuming said carbohydrate.

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose (palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccharides (Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds. Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10)

Instant claim 2 is drawn to a reducer of blood glucose level increase, comprising palitinose as an active ingredient, wherein said reducer is ingested by an individual, before or after or simultaneously with consuming said foodstuff selected from the group consisting of sucrose, wheat flour, starch, dextrin and high fructose corn syrup, said reducer reduces an increase in blood glucose level of the individual caused by consuming said foodstuff.

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose (palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccarides(Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds. Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10)

Instant claim 3 is drawn to a reducer of blood glucose level increase, comprising palitinose as an active ingredient, wherein said reducer is ingested by an individual,

before or after or simultaneously with consumed, said reducer reduces an increase in blood glucose level of the individual caused by consuming said food.

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose(palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccharides(Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds.Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10)

Instant claim 4 is drawn to a reducer of body fat accumulation, comprising palitinose as an active ingredient, wherein said reducer is ingested by an individual, before or after or simultaneously with consuming carbohydrate having an alpha-1,6-glucosyl bond ratio of from 0% to less than 50% relative to the total bonds among constituent saccharides, said reducer reduces an increase in body fat accumulation from the increase in blood glucose level and insulin secretion of the individual caused by ingesting said carbohydrate.

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose(palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccharides(Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds. Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level

increase.(Abstract and column 3, lines 6-10) . The chocolate taught by Mentik et al. would also decrease body fat accumulation, according to the instant claim.

Instant claim 5 is drawn to a reducer of body fat accumulation, comprising palitinose as an active ingredient, wherein said reducer is ingested by an individual, before or after or simultaneously with consuming said foodstuff selected from the group consisting of sucrose, wheat flour, starch, dextrin and high fructose corn syrup , said reducer reduces an increase in body fat accumulation of the individual caused by consuming said foodstuff.

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose(palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccarides(Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds. Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10) . The chocolate taught by Mentik et al. would also decrease body fat accumulation, according to the instant claim.

Instant claim 6 is drawn to a reducer of body fat accumulation, comprising palitinose as an active ingredient, wherein said reducer is ingested by an individual, before or after or simultaneously with consumed, said reducer reduces an increase in body fat accumulation of the individual caused by consuming said food.

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose(palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being

0-50% of the total bonds among saccharides (Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds. Furthermore, isomaltose (or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase. (Abstract and column 3, lines 6-10). The chocolate taught by Mentik et al. would also decrease body fat accumulation, according to the instant claim.

Instant claim 7 is drawn to a food material comprising palatinose and a foodstuff composed of a carbohydrate having an alpha-1,6-glucosyl bond ratio of from 0% to less than 50% relative to the total bonds among constituent saccharides, said reducer reduces an increase in blood glucose level of the individual caused by consuming said food stuff

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose (palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccharides (Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds. Furthermore, isomaltose (or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase. (Abstract and column 3, lines 6-10). The chocolate taught by Mentik et al. would also decrease body fat accumulation, according to the instant claim.

Instant claim 8 is drawn to a food material comprising palatinose and said foodstuff selected from the group consisting of sucrose, wheat flour, starch, dextrin and

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high fructose corn syrup, wherein said food material reduces an increase in blood glucose level of the individual caused by consuming said food stuff

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose(palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccarides(Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds.Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10) .

Instant claim 9 is drawn to a food material according to claim 8, wherein said food material is used as a sweetener and said foodstuff is at least one foodstuff selected from the group consisting of sucrose and high fructose corn syrup.

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose (palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccarides(Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds.Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10) . Mentik et al also teaches of isomaltulose as a sweetening mass or sweetener. (Abstract and column 7, lines 50-52)

Instant claim 10 food material according to claim 8, wherein said food material is used as a premix material and said foodstuff is least one foodstuff from the group consisting of sucrose, wheat flour, starch and dextrin.

Mentik et al. teaches of crystallized hydrogenated isomaltose (palitinoses) (Abstract and column 8, lines 35-40) which can be used as a premix. Mentik et al. ,also, teaches of a chocolate composition composing sucrose. (Abstract and column 11 and 12, Table I)

Instant claim 11 is drawn to claim 8 wherein said food material is used as a powdery drink and said food stuff is sucrose.

Mentik et al. teaches of crystallized hydrogenated isomaltose (palitinoses) (Abstract and column 8, lines 35-40) which can be used in combination with water, or in a combination with milk powder (Abstract and column 8, lines 55-60) and water to create a powdery drink. Mentik also teaches of sucrose. (Abstract and column 11 and 12, Table I)

Instant claim 13 is drawn to a food material I comprising palatinose and a foodstuff composed of a carbohydrate having an alpha-1,6-glucosyl bond ratio of from 0% to less than 50% relative to the total bonds among constituent saccharides, wherein said food material reduces body fat accumulation resulted from the increase I blood glucose level and insulin secretion of an individual caused by consuming said food stuff.

Mentik et al. teaches of a low calorie chocolate that can comprise of a food material- isomaltulose (palitinoses) (Abstract and column 8, lines 35-40) and a foodstuff- sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds

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among saccharides(Abtract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds.Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abtract and column 3, lines 6-10)

Instant claim 14 is draw to a food material I comprising palatinose and a foodstuff selected from the group consistin of sucrose, wheat flour, starch, dextrin and high fructose corn syrup ,wherein said food material reduces body fat accumulation resulted from the increase I blood glucose level and insulin secretion of an individual caused by con consuming said food stuff.

Mentik et al. teaches of a low calorie chocolate that can comprise of a food material- isomaltulose(palitinose)(Abtract and column 8, lines35-40) and a foodstuff- sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccharides(Abtract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds.Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abtract and column 3, lines 6-10)

Instant claim 15 is drawn to a food material according to claim 14, wherein said food material is used as a sweetener and said foodstuff is at least one foodstuff selected from the group consisting of sucrose and high fructose corn syrup.

Mentink et al. teaches isomaltulose(palitinose) used as a sweetening mass.(Abstract and column 7, lines 48-51) and Metink et al. also teaches of sucrose.(Abstract and column 11 and 12, table 1) Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10)

Instant claim 16 is drawn to a food material according to claim 14, wherein said food material is used as a premix material and said foodstuff is at least one foodstuff selected from the group consisting of sucrose, wheat flour, starch and dextrin.

Mentik et al. teaches of crystallized hydrogenated isomaltose(palitinose)(Abstract and column 8, lines35-40) which can be used as a premix. Mentik et al. ,also, teaches of sucrose. (Abstract and column 11 and 12, Table I) Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10)

Instant claim 17 is drawn to a food material according to claim 14, wherein said food material is used as a powdery drink and said foodstuff is sucrose.

Mentik et al. teaches of crystallized hydrogenated isomaltose(palitinose)(Abstract and column 8, lines35-40) which can be used incombination with water, or in a combination with milk powder(Abstract and column 8, lines 55-60) and water to create a powdery drink. Mentik also teaches of sucrose. (Abstract and column 11 and 12,

Table I) Furthermore, isomaltose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 7, 12-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mentink et al.(US patent No. 5,360,621;issued Nov.1,1994).

Instant claim 12 is drawn to claim 7, wherein the weight(A) of palatinose has a ratio of 10% or more relative to the total weight (B) of carbohydrate contained in said food material, and said palatinose is combined so that said palatinose is ingested by 5g or more per 60 kg of body weight of individual ingesting the food material.

Mentik et al. teaches of a low calorie chocolate that comprises isomaltulose(palitinose) and sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccarides (Abstract and column 11 and 12, Table I). This is due because sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds. Furthermore, isomaltulose(or palitinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase.(Abstract and column 3, lines 6-10) . The chocolate taught by Mentik et al. would also decrease body fat accumulation, according to the instant claim. Mentik et al. also teaches that the isomaltulose(palatinose has a ratio of 10% or ore relative to the total weight of carbohydrate contained in said food material.(Abstract and column 11 and 12, Table I) The latter end of the claim would be met because with routine experimentation. Therefore it would have been prima facie obvious to one of ordinary skill in the art and the time of the invention to get an optimum administration rate, which in this case is 5g or more per 60kg body weight, through routine experimentation.

Instant claim 18 is drawn to claim 13, wherein the weight(A) of palatinose has a ratio of 20% or more relative to the total weight (B) of carbohydrate contained in said food material, and said palatinose is combined so that said palatinose is ingested by 5g or more per 60 kg of body weight of individual ingesting the food material.

Mentik et al. teaches of a low calorie chocolate that can comprise of a food material- isomaltulose(palitinose)(Abstract and column 8, lines35-40) and a foodstuff- sucrose, with most of the an alpha-1,6-glucosyl bond being 0-50% of the total bonds among saccarides(Abstract and column 11 and 12, Table I). This is due because

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sucrose does not contain alpha-1,6-glucosyl bonds and the other polyols contain very few of these bonds. Furthermore, isomaltose (or palatinose) is a polyol that is slowly metabolized and is a reducer of blood glucose level increase. (Abstract and column 3, lines 6-10) Mentik et al. also teaches that the isomaltulose (palatinose) has a ratio of 20% or more relative to the total weight of carbohydrate contained in said food material. (Abstract and column 11 and 12, Table I) The latter end of the claim would be met because one of skill in the art at the time the invention was made would be motivated to optimize experimental results with routine experimentation. Therefore it would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to get an optimum administration rate, which in this case is 10g or more per 60kg body weight, through routine experimentation.

SN

/Patrick J. Nolan/

Supervisory Patent Examiner, Art Unit 4161